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CLAIM AMENDMENTS

1   1. (Currently amended) A method comprising the steps of:

2   sending one or more upstream signals as pulse code modulated data without packet

3   headers using an upstream cable protocol, wherein at least one of the one or more upstream

4   signals is a video signal;

5   sending one or more downstream signals as pulse code modulated data without packet

6   headers using a downstream cable protocol; and

7   enclosing the one or more downstream signals as the pulse code modulated data without

8   application-level packet headers in a Motion Pictures Experts Group (MPEG) transport, while

9   limiting use of echo cancellation and jitter buffering.

1   2. (Previously presented) The method of claim 1, wherein the upstream protocol is Data-

2   Over-Cable System Interface Specification (DOCSIS).

1   3. (Original) The method of claim 1, wherein the step of sending one or more upstream

2   signals comprises mapping one or more pulse code modulated samples of the one or more

3   signals taken at a sampling interval to an allocation of mini-slots in the upstream protocol.

1   4. (Original) The method of claim 3, wherein the sampling interval is 125 microseconds

2   and the mini-slots occur at 6.25 microsecond intervals.

1   5. (Original) The method of claim 1, further comprising the step of multiplexing two or

2   more signals in one mini-slot in the upstream protocol.

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1   6. (Previously presented) The method of claim 1, wherein the downstream protocol is

2   Data-Over-Cable System Interface Specification (DOCSIS).

1   7. (Original) The method of claim 1, wherein the step of sending one or more

2   downstream signals comprises mapping one or more pulse code modulated samples of the one or

3   more signals taken at a sampling interval to a Motion Pictures Experts Group (MPEG) transport

4   layer.

1   8. (Original) The method of claim 1, wherein the step of sending one or more

2   downstream signals comprises multiplexing multiple signals within a single Motion Pictures

3   Experts Group (MPEG) packet identifier.

1   9. (Original) The method of claim 1, wherein the method is performed in a cable system

2   having a media terminal adapter (MTA), such that subscriber signalling functionality is reduced

3   in the MTA.

1   10. (Original) The method of claim 1, wherein the method reduces throughput delay and

2   jitter for signals, thereby improving signal quality over existing transport methods.

1   11. (Currently amended) The method of claim 1, wherein the at least one of the one or

2   more upstream signals and the one or more downstream signals is a voice signal.

1   12. (Original) The method of claim 1, wherein at least one of the one or more upstream

2   signals and the one or more downstream signals is a video signal.

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1   13. – 20. (Canceled)

1   21. (Currently amended) A method comprising the steps of:

2   providing one or more signals at a sampling interval, yielding pulse code modulated

3   (PCM) data;

4   transporting downstream signals as the PCM data without packet headers over a cable

5   media using a downstream cable protocol, wherein at least one of the downstream signals is a

6   video signal; and

7   enclosing the downstream signals as the pulse code modulated data without application-

8   level packet headers in a Motion Pictures Experts Group (MPEG) transport, while limiting use of

9   echo cancellation and jitter buffering.

1   22. (Previously presented) The method of claim 21, wherein the downstream protocol is

2   Data-Over-Cable System Interface Specification (DOCSIS).

1   23. (Original) The method of claim 21, wherein the step of providing the one or more

2   signals comprises mapping each byte of pulse code modulated data to a Motion Pictures Experts

3   Group (MPEG) transport layer.

1   24. (Original) The method of claim 21, wherein the step of providing the one or more

2   signals comprises multiplexing multiple signals within a single Motion Pictures Experts Group

3   (MPEG) packet identifier.

1   25. (Original) The method of claim 21, wherein the method reduces throughput delay and

2   jitter for signals, thereby improving signal quality over existing transport methods.

1   26. (Original) The method of claim 21, wherein at least one of the one or more signals is

2 a voice signal.

1   27. (Original) The method of claim 21, wherein at least one of the one or more signals is

2 a video signal.

1   28. (Currently amended) An apparatus comprising:

2   a sampler, arranged and constructed to sample one or more signals at a sampling interval,

3 yielding pulse code modulated (PCM) data; and

4   a transport device, arranged and constructed to transport the PCM data without packet

5 headers over a cable media using an upstream cable protocol;

6   wherein the transport device transports downstream signals enclosed as the pulse code

7 modulated data without application-level packet headers in a Motion Pictures Experts Group

8 (MPEG) transport, <u>and wherein at least one of the downstream signals is a video signal</u> ~~while~~

9 ~~limiting use of echo cancellation and jitter buffering~~.

1   29. (Previously presented) The apparatus of claim 28, wherein the upstream protocol is

2 Data-Over-Cable System Interface Specification (DOCSIS).

1   30. (Original) The apparatus of claim 28, wherein the step of sampling the one or more

2 signals comprises mapping each byte of pulse code modulated data to one of a plurality of mini-

3 slots in the upstream protocol.

1   31. (Original) The apparatus of claim 30, wherein the sampling interval is 125

2 microseconds and each of the plurality of mini-slots occurs at 6.25 microsecond intervals.

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1   32. (Original) The apparatus of claim 28, further comprising a multiplexor for

2   multiplexing two or more signals in one mini-slot in the upstream protocol.

1   33. (Original) The apparatus of claim 28, wherein the apparatus reduces throughput delay

2   and jitter for signals, thereby improving signal quality over existing transport methods.

1   34. (Original) The apparatus of claim 28, wherein at least one of the one or more signals

2   is a voice signal.

1   35. (Currently amended) The apparatus of claim 28, wherein at least one of the one or

2   more signals is [[a]] the video signal.

1   36. (Original) The apparatus of claim 28, wherein the apparatus is part of a media

2   terminal adapter.

1   37. (Canceled)

1   38. (Currently amended) The method of claim 1, wherein the step of sending one or more

2   upstream signals further comprises the step of sending the one or more upstream signals as pulse

3   code modulated data in a form that allows transfer to Public Switched Telephone Network

4   (PSTN) without transcoding the pulse code modulated data of the one or more upstream signals.